

PENGARUH LAMA CURING TERHADAP KUALITAS GELATIN KULIT SAPI

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INTISARI

Gelatin dalam industri pangan merupakan salah satu hidrokoloid yang larut dalam air yang bisa digunakan sebagai pembentuk gel, pengental dan penstabil. Penelitian ini bertujuan untuk mengetahui pengaruh lama *curing* terhadap kualitas gelatin kulit sapi. Sebagai materi penelitian digunakan 4,5 kg kulit sapi umur 2-2,5 tahun. Kulit dipotong-potong ukuran kecil, di *curing* pada suhu refregerator selama 2,4 dan 6 hari. Selanjutnya kulit dicuci dengan air, direndam dalam larutan 0,1 M H₂SO₄ selama 24 jam. Kulit diekstraksi pada suhu 70 °C, selama 24 jam. Kotoran dipisahkan dengan cara disaring. Gelatin dikeringkan pada suhu 65°C selama 24 jam, film yang terbentuk ditimbang dan dibuat bubuk (*powder*). Kualitas gelatin ditentukan berdasar uji rendemen, kekuatan gel, viskositas, kadar protein dan kadar air. Analisis data menggunakan analisis pola searah, kemudian apabila terdapat beda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test*. Hasil penelitian menunjukkan bahwa pengaruh lama waktu *curing* tidak berbeda nyata ($P > 0,05$) terhadap rendemen, kekuatan gel, viskositas, kadar protein dan kadar air. Rata-rata karakteristik gelatin kulit sapi dari hasil penelitian yaitu rendemen 9,23-9,52%, sedangkan untuk kekuatan gel 72,95-77,57 gram *Bloom*, viskositas sebesar 7,10-7,47 poise, kadar protein 90,43-93,27% dan kadar air 9,33-9,97%. Kualitas gelatin yang dihasilkan sesuai standar yang ada dipasaran sehingga bagus dan layak digunakan untuk proses lebih lanjut.

Kata Kunci : Gelatin, Kulit sapi, *Curing* dan Kualitas gelatin

THE EFFECT OF CURING TIME ON THE QUALITY OF GELATIN HIDE CATTLE

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ABSTRACT

Gelatin in the food industry is one hydrocolloids which is soluble in water that can be used for the formation of gel, thickener and stabilizer. The objective of the research was to study the effect of curing time on the quality of gelatin hide cattle. There were 4.5 kg of hide used in this experiment. Hide was taken from 2-2.5 years old cattle. Hide was cut in to small size then continued for curing in refrigerate temperature. The time's of curing were 2 days, 4 days and 6 days. The process was continued by washing the hide under flowing water. The hide then was neutralized using 0.1 M sulfuric acid for 24 hours in order to removed lime. Hide containing free lime was extracted at 70°C for 24 hours. Gelatin was dried at 55°C for 24 hours. The formed film was weighed and ground to produce gelatin powder. The quality of gelatin was determined based on its rendement, gel strength, viscosity, protein and water content. The data were analyzed using One Way Anova design. The significant differences, was analyzed using the Duncan's New Multiple Range Test. Result of the research showed that the influence of curing time was not significant ($P>0.05$) to rendement, gel strength, viscosity, protein values and dry matter. Average of gelatin characteristic were rendement value of 9.23-9.52%, gel strength 72.95-77.57 gram Bloom, viscosity 7.10-7.47 poise, protein content 90.43-93.27% and water content 9.33-9.97%. Quality of gelatin were qualified based on standard market, and properly using for further processing.

Key words : Gelatin, Hide cattle, *Curing* dan Quality of gelatin